



**THE AGRICULTURAL ECONOMY IN NEBRASKA:
MAKING NEBRASKA THE AGRICULTURAL
LEADER OF THE 21ST CENTURY
FINAL REPORT**

**CONDUCTED FOR
THE NEBRASKA STATE DEPARTMENT OF AGRICULTURE**

**By
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EXECUTIVE SUMMARY AND STRATEGIC PLAN

Background

In March 2002 the Nebraska Department of Agriculture engaged Decision Analyst, Inc., a marketing research and consultancy firm in Arlington, Texas, to conduct a comprehensive study on the agricultural economy in Nebraska, to include broad strategic recommendations on enhancing the growth of that economy for the years to come. This study was funded by a federal grant. In the execution of the study Decision Analyst teamed with Doane Marketing Research, Inc., a St. Louis, Missouri firm that specializes in agricultural research.

The study consisted of four phases:

1. Secondary data collection and analysis of recent and current trends in agriculture, both in the U.S. and in Nebraska.
2. Qualitative research that included more than 60 in-depth interviews and six focus group discussions with producers, consumers, academicians, and government and business leaders involved in agriculture.
3. Quantitative research that consisted of five separate surveys, described in the table below.

Sample	Data Collection Method	Number Of Respondents
Nebraska Producers	Mail	566
Producers In Nearby States	Internet	214
Nebraska Non-Ag Consumers	Internet	412
County Extension Personnel In NE And Nearby States	Phone/Internet	210
Ag-Related Corporation And Association Executives	Phone/Internet	42

4. A Strategic Planning Workshop with a broad cross-section of participants. In addition to executives from the Nebraska Department of Agriculture, the participants included producers from various parts of the State, executives from corporations and trade associations, academicians, consultants, and State elected representatives. Decision Analyst managed this two-day workshop and along with Doane Marketing Research facilitated small and large-group discussions with the participants that contributed to the key strategic initiatives outlined in this report.

Key Findings

As a result of the research in Phases 1, 2 and 3, the Decision Analyst/Doane team drew the following conclusions:

- Despite its declining growth and contraction in overall value, agriculture continues to be Nebraska's most important, and one of its strongest, economic sectors. Livestock production accounts for most (two-thirds, or close to \$6 billion) of the total value of the State's agricultural production. Cattle comprise more than 80% of livestock production. However, the total value of cattle production in Nebraska increased by only 1.4% from 1990 to 2000. In addition, the expansion of Nebraska's livestock industry is constrained by State regulations.
- In Nebraska the production of corn and soybeans and the production of livestock provide synergistic advantages. That is, livestock production provides a ready, local market for corn and soybeans as feed. In general, the greater production of each type of commodity benefits the other. However, surplus production of corn and soybeans, and resulting low prices, has contributed to a trend of lower profit margins for both sectors.
- Agriculture is in a period of transition, both within and outside of Nebraska. Economic pressures are forcing farm and ranch operations to consolidate in order to stay competitive, while at the same time resistance to consolidation by environmental groups, pro-family-farm groups, and others is increasing. Many medium-sized farming and ranching operations need to grow in order to remain viable; however, their growth is limited by low profit margins, poor access to capital, and State regulations that hinder mergers into larger operations, especially limited

liability corporations. Coupled with these economic pressures is the aging of the farming population. A large base of farmers and ranchers is retiring or will soon retire, and sons, daughters, and other sources of younger farmers are not taking their place as in times past. The public as well as farmers themselves perceive agriculture to be a difficult and often financially unrewarding way to make a living, although most farmers value its lifestyle.

- Nebraska has self-imposed some significant barriers, legislative and by referendum, that may not allow it to continue competing effectively in a rapidly changing global marketplace. Nebraska was the only state in the Corporations and Associations survey to receive both high and low marks for being an attractive place to conduct business. While most respondents were complimentary, some executives were highly critical of what they viewed as the State's anti-business policies, particularly Initiative 300 and local control of zoning. These barriers especially threaten the vitality of Nebraska's livestock industry, the key economic driver for the agricultural economy in Nebraska. While many farmers and ranchers support Initiative 300, it does seem to have hindered the rational expansion and growth of Nebraska's agricultural economy.
- Nebraska's agricultural economy has a strong competitive advantage relative to most other Midwest and Northern Plains farm states. Producers in other states ranked Nebraska fourth in agricultural competitiveness behind Iowa, Kansas, and Illinois, and only Iowa ranked ahead of Nebraska in competitive position, according to organizational leaders at key corporations and trade associations.
- Nebraska's competitive advantages include its climate, its abundant natural resources (particularly water), a good transportation infrastructure, its proximity to raw materials, and its superior balance of livestock (particularly cattle) and crop production.
- Corporations and associations rated Iowa and Kansas high in competitiveness primarily because of their less stringent legislative restrictions on agribusinesses. Iowa, in particular, was viewed as a desirable location; however, some corporate leaders expressed concern at current efforts to restrict agribusinesses in Iowa as well as other states, including South Dakota and Minnesota.

- Many corporate and trade association leaders seemed to adopt an attitude of “the grass is greener in the next state,” regardless of their state of origin. Nebraska executives, in fact, were more critical of Nebraska’s business climate than those based in other states. This suggests that current agricultural conditions have created anxiety among at least some of those associated with agribusiness in Nebraska and other farm states. This provides a potential opportunity for Nebraska to attract desirable businesses to the State; that is, those that are dissatisfied with the political, social, or economic climates in their states.
- Agribusiness companies are attracted to many of Nebraska’s attributes, but they are uncertain where it stands on key determining factors such as tax structure, land and livestock ownership, local zoning laws, and the public’s acceptance of “big business” interests.
- Many producers in Nebraska are risk averse and are reluctant to adopt the latest business practices and agricultural techniques. These include value-added production and niche marketing. Much of the reluctance is due to a lack of capital or access to capital that is a result of persistently low profit margins.

Megatrends In Agriculture: The Next Ten Years And Beyond

Based on a comprehensive review of available data, Decision Analyst/Doane identified seven major agricultural trends that are having, or will have, a significant impact on the agricultural economy in the U.S. and Nebraska in the next decade:

- The consolidation of commercial farms will continue.
- Agribusinesses will continue to consolidate.
- Worldwide demand for meat and value-added food products will increase.
- Prices for commodity grain crops will remain low.
- Changes in energy sources will help grain producers.
- Biotechnology’s influence will expand.
- Electronic commerce will open markets.

The Consolidation Of Commercial Farms Will Continue

A trend of the past decade and one that will continue is the polarization of large and small farm and ranch operations. While commercial operations represent only about 10% of all farming operations, they account for more than two-thirds of the country's agricultural output. The number of large commercial farms continues to grow; so too do the number of very small "lifestyle" farms (farms that are worked only part-time and do not provide full subsistence for their owners). Although more than one-half of all farms are lifestyle farms, they account for only 2% of all farming output.

The segments that have shrunk and will continue to shrink are the small- and medium-sized producers. These producers sometimes grow into larger-scale operations. However, many sell out to larger operations while still maintaining some land that enables them to continue the farming lifestyle in conjunction with other sources of income; hence, the polarization of the largest and very smallest producers. We believe that this polarization will continue, with the numbers of large and very small producers growing at the expense of small- to medium-sized producers. In order to remain competitive, smaller producers will need to improve their efficiencies, and should engage in specialized or value-added crop and livestock production, form cooperatives or alliances with other producers, and expand their use of electronic commerce, as well as maintain off-farm income.

Agribusinesses Will Continue To Consolidate

The trend to consolidate is not unique to agriculture. It is occurring in virtually every major economic sector, and is the result of economic pressures exerted in an increasingly global marketplace. Lower margins force companies to work with larger economies of scale in order to remain competitive. As agribusiness companies continue to grow in size, so too will their management and control over individual producers, the most successful of whom will also be getting larger. As a result, there will be an increase in the number of long-term contracts between agribusiness companies and large individual producers and cooperatives, more direction and control of production, and a greater use of precision farming techniques.

Worldwide Demand For Meat And Value-Added Food Products Will Increase

The demand for high quality meat will accelerate in developing countries, particularly in Asia. As a result, consumers worldwide will demand more high quality processed foods. This will provide livestock producers with significant opportunities for growth, especially if they are willing and able to invest in value-added processing and if they are in a position to expand the size and scope of their operations. Currently, many livestock producers in Nebraska are reluctant to invest in value-added processing because of lack of capital, lack of knowledge, or aversion to risk. However, those who have capital, know-how, and risk tolerance and have partnered with processors tend to be successful due to the growing worldwide demand for value-added foods, especially beef.

Consumers strongly favor identity-preserved and point-of-origin labeled foods. Although producers face significant logistical and economic challenges in labeling products in the short term, it could present equally significant opportunities to those with large operations who can maintain multiple, distinct storage systems. Country point-of-origin labeling will increase production costs in the short term, but could ultimately help spur demand for branded or U.S. (or Nebraska) products. This could particularly help Nebraska with its strong beef industry, but this issue favors those who are willing and able to take risks with specialty products and with niche marketing.

Prices For Commodity Grain Crops Will Remain Low

A surplus of commodities brought about by improved efficiencies, such as precision farming, along with increased global competition will all but ensure that the prices producers receive for their commodities will remain low. Because of their larger volume of production, larger operations will benefit more from price supports than will smaller producers. This, in turn, will further the trend toward larger, fewer operations. Low prices for commodity grain crops will continue to negatively impact their profitability, but it will mean continued low prices for livestock feed. While this reduces costs for livestock producers, it influences the trend to larger animals, more supply, and lower prices overall.

Changes In Energy Sources Will Help Grain Producers

Unquestionably, the most important value-added product to the State's economy is, and will continue to be ethanol production. Demand for ethanol will increase, as states look to provide more energy-efficient fuels. One especially important market is California. In addition to eliminating fuels that use Methyl Tertiary-Butyl Ether (MTBE), California, in July 2002 passed legislation that mandates reductions in carbon dioxide emissions from motor vehicles beginning with model year 2009. Furthermore, in 2001 the Bush administration refused to grant California a waiver to the 1990 Clean Air Act that requires urban-area gas stations to sell gasoline specially formulated to reduce smog. As a result, the country's ethanol production could increase by as much as 25% by the end of 2003. All told, California estimates that it could use over 40% of the nation's total ethanol capacity in 2003.

Policy decisions at the federal level along with increased demand for ethanol could dramatically increase U.S. net farm income and create many new jobs over the next few years. The proposed "Energy Policy Act" of 2002 would have mandated a renewable fuel requirement that would have increased the demand for ethanol even more. However, the 107th Congress failed to pass the bill even though versions had passed both the House and the Senate and was awaiting reconciliation. The prospect of reviving the legislation is uncertain at this time.

Still, even without the nationwide renewable fuels standard, the demand for ethanol should substantially increase. In addition to consumer uses, industrial uses of ethanol and bio-diesel fuels should continue to increase, as evidenced by the success of the Cargill operation in Blair. Although there is at present only one bio-diesel plant based in Nebraska, other plants should come on line as demand increases. The State should continue to develop programs and strategies to encourage alternative fuel production as an important value-added initiative.

Finally, in addition to ethanol and bio-diesel, increased demand for other alternative energy sources such as wind turbines could provide additional sources of income to landowners who wish to participate by directly investing or by leasing their land.

Biotechnology's Influence Will Expand

Biotechnology will evolve from the manipulation of input traits (such as Roundup Ready soybeans or Bt corn) to the enhancement of output traits, notably the product's color, texture, taste, and even nutritional or pharmaceutical qualities. For this reason, consumers, both at home and abroad, will eventually accept GMO products for their superior quality and their immediate health and nutritional benefits. In addition, nutraceuticals will become an important and fast-growing segment of the food industry. Increasingly, more producers will partner with biotech companies in long-term contracts. These companies will, in turn, exercise increasing control over the production of crops.

Although biotechnology can lower the cost of production, it is unclear as yet whether these savings would be passed on to consumers. If they were, consumer acceptance of GMOs would likely increase, particularly if the savings exceeded 25% of the cost of non-GMO processed foods.

Electronic Commerce Will Open Markets

Two-thirds of Nebraska producers indicated that they owned a personal computer and had access to the Internet. Seven out of eight producers said they own a cell phone. Technological expertise will become an increasingly important factor in the financial viability of producers.

The Internet has the potential to free producers from being forced to buy inputs from and sell outputs to the nearest point-of-sale. As a result, increased use of the Internet will reward some producers with lower input costs and more profitable sales opportunities (at the same time, it may play a role in driving some local suppliers out of business). In addition to encouraging futures contracts, the Internet will also make it easier for producers to form "virtual" partnerships/consolidations with other producers, thereby giving them greater bargaining power in buying inputs and selling their products.

In summary, we believe that many of these trends will continue beyond the current decade, specifically:

- For the most successful producers, there will be even greater cooperation and partnerships with other producers, and with agribusinesses.
- There will be more joint ownership of farms and ranches, as the need to consolidate and operate larger economies of scale increases.
- The trend toward specialization will continue, including an increase in value-added food production. Innovation will characterize the food production and processing chains.
- Biotechnology will continue to transform agriculture.

The Vision For Nebraska Agriculture

Nebraska's agricultural economy, like the agricultural economy in the United States and indeed, the world, stands on the cusp of a period of unprecedented change and opportunity. Nebraska has the choice of maintaining the status quo and perhaps being left behind in a gradual decline, or embracing change in a bold, energetic way that could make it the industry's leader in the 21st Century. Here are the alternatives:

If Nebraska Does Nothing Different

Desirable agribusinesses will increasingly favor the more business-friendly states. Given the tensions that now exist among agribusiness, urban growth, and environmental and pro-family-farm advocates in every state, these businesses may consider relocating their operations to states or nations that provide friendlier business climates. The evidence suggests that, although Nebraska currently holds a strong position relative to other farm states, it may be at a disadvantage in its ability to continue to compete given the dramatic transformations that are now underway in agriculture, not only in Nebraska but also throughout the U.S. and in the rest of the world.

By most accounts, Nebraska has done well in balancing the needs of the environment with those of businesses and producers of all sizes. The State has historically placed

the welfare of the smaller producer first. However, in its efforts to protect the family farmer, the State may have erected barriers to the growth and ultimate well being of its agricultural economy. For example, because of regulatory barriers, some producers have found that their access to capital and ability to invest or expand their operation is limited. In addition, partnerships between producers and processors are restricted, as is the formation of formal, legal cooperation between unrelated producers.

If existing barriers to consolidation are not relaxed, the most successful Nebraska producers could be hamstrung in their ability to effectively compete in the global marketplace. Nebraska would have fewer commercially successful operations relative to other leading farm states. The health of Nebraska's rural economies may suffer, resulting in increased tension between urban and rural areas, as urban dwellers are forced to pay higher taxes in order to support rural areas. The alternative would be a continued decline of rural areas by a further reduction in available services, such as the proximity of schools and available healthcare, and/or needed improvements in infrastructure, particularly in the transportation and technology sectors.

Whether or not the State changes its rules and regulations, the consolidation of the most successful farms and ranches will continue as producers respond to irresistible economic pressures. However, without change, Nebraska producers will face limited opportunities for growth by way of developing alliances and partnerships. Such partnerships will be essential for producers to thrive in the developing global marketplace.

If Nebraska Is Proactive

At present, Nebraska can sell itself as a state with abundant land and natural resources, a desirable workforce, a strong transportation infrastructure, and livestock and crop production systems that support each other. These factors alone, however, are not enough to attract and retain the most important types of businesses, especially the vanguard companies that develop job creation momentum by attracting other companies. In a sense, Nebraska may be something of an underachiever. With all of its advantages, it is a little surprising that Nebraska doesn't command an even greater economic position among key farm states. This is partly due, no doubt, to the State's interest in balancing the needs of large and small producers. However, considering the

current and future agricultural megatrends, Nebraska has the opportunity to dramatically increase its economic position, to perhaps even position itself as the top agricultural producer in the country, if it acts forcefully and quickly.

In order for Nebraska to realize its potential, it must improve its business climate. This is not just limited to changing the tax structure or offering more attractive incentives for corporations, but it also includes developing policies that can more effectively attract the economic engines that could enhance Nebraska's position. Nebraska needs to become and to promote itself as a corporate-friendly state, with pro-business policies and a pro-business tax structure.

Nebraska must communicate that it is eager to attract desirable businesses such as food processing plants, bio-fuel plants, and biotechnology companies, through a combination of tax breaks and innovative policies. And, it must assist local communities in marketing themselves.

The State should strive for the name "Nebraska" to become synonymous with innovation. It needs to be known as a state with sophisticated producers who use the latest cutting-edge techniques to improve yields and profitability. It needs to become recognized as a place where top agribusiness scientists work closely within the university system as well as with top producers.

Nebraska must become a strong advocate for farming as a profession. Rather than focusing on the negatives, Nebraska needs to champion production agriculture as not merely viable, but as a desirable profession; and to promote Nebraska as a place where agricultural producers are held in high regard. Indeed, if Nebraska fully embraces the technological advances currently underway, particularly in the field of biotechnology, it may find itself in the enviable position as a strong champion for one of the most important and sought-after sectors of the next 20 years. However, it is critical for Nebraska to develop strategies that retain and attract young, bright, energetic, and forward-thinking producers to the state. The best place to start is to encourage parents and teachers to emphasize the attractive features and the future possibilities for agricultural production, not the currently perceived negatives.

In order to achieve these goals, Nebraska needs to foster an even closer working relationship between policy-makers and county officials to coordinate pro-business initiatives, as well as between agribusinesses and the more responsible environmental groups. It is also important to communicate to the public the link between agriculture and the welfare of everyone in the State, particularly the urban populations.

Strategic Plan To Make Nebraska The Agricultural Leader Of The 21st Century

The four phases of research in the comprehensive study on the agricultural economy in Nebraska—the situation analysis, qualitative research, quantitative research, and workshop with experts—point to four key strategic objectives that, if accomplished, could set Nebraska onto the path of leadership of the industry in the 21st Century. These objectives, along with corollary actions, are described in the following paragraphs.

1. Lessen Regulatory Barriers That Hinder Agricultural Business Opportunities.

- Reduce barriers to growth, particularly to the livestock industry. Focus on legislative barriers that impede the ability of producers to remain competitive and deter potential business development opportunities. Start by commissioning an experienced objective third-party to conduct an economic impact study for Nebraska agriculture, specifically focusing on the both the positive and negative impacts of Initiative 300.
- Address the issue of zoning. Consider alternatives to zoning regulations that can both enhance the state's attractiveness to business and adequately address environmental concerns, while at the same time leaving local control of zoning intact.

2. Attract More Agribusiness To The State.

- Build alliances with businesses outside the State. Become more globally focused, and particularly develop relationships with businesses that are players in the global marketplace. Communicate to businesses, in both words and deeds, that Nebraska is a business-friendly state. Study ways to modify I-300 and improve zoning regulations to allow business consolidation and growth.
- Develop a capital venture fund that encourages desirable or targeted business investment efforts, particularly in the areas of value-added production and non-agricultural rural development efforts. The State may want to consider a venture capital loan program similar to the one in Iowa, where the fund is largely self-supported through the interest paid back with the loan.
- As an effort to encourage the formation of businesses (agricultural and non-agricultural) in rural communities, develop a system with which the State Department of Agriculture could match different parts of the State with compatible types of businesses. Specifically market these locations to targeted businesses. In effect, the Department would assume the role of a matchmaking service for businesses and local development areas.
- Explore existing state-sponsored initiatives and incentives designed to attract business to the state. Specifically focus on whether or not they are attractive to agribusiness interests, and whether they favor businesses located inside or outside the State. Depending on the outcome the research, the State may decide to implement changes or new legislation that strengthens Nebraska's appeal to outside business prospects.

3. Promote Nebraska Agriculture Both Within And Outside The State.

- Develop a cadre of advocates, preferably based in Washington D.C., that can effectively lobby for the interests of Nebraska on the federal level. Select individuals who can be effective grant finders as well as grant writers, and are skilled in navigating federal corridors to find additional funding sources.

- Develop strategies for promoting agriculture as a vibrant, desirable, and profitable industry, focusing on both current and future producers, through:
 - Public media/advertising
 - “Town hall” meetings with producers and other interested parties
 - Meetings with trade associations
 - County extension personnel
 - The Internet.
- Commission a study to identify barriers to the transition between old and new farmers. Explore enhancing or modifying current “bridge programs” to assist young or new farmers in acquiring farms from retiring producers and in making their new enterprises successful. Re-examine existing tax credits to see if they could be increased, and better publicize and market the current tax incentive program. Work with the University of Nebraska to utilize its database of alumni as a marketing tool to attract alumni capital and human resources back to the State.

4. Promote And Employ The Latest Technological Advances And Best Business Practices.

- Develop strategies for stressing the positives and potential of production agriculture in Nebraska. Focus on current producers as well as young farmers and ranchers. Communicate the message whenever possible through multiple modes and media, including advertising campaigns, “town hall” meetings with producers, extension educators, and the Internet. Work with high schools (especially through 4-H and FFA) and the University of Nebraska to more fully integrate business training and best business practices into their agricultural coursework.
- Orchestrate an effort to emphasize a change in attitude within families, schools, and communities that presents agriculture as a desirable vocation with ample opportunities for growth and fulfillment. Encourage this change in attitude within the family unit and also at the secondary and university levels. The State may want to consider developing an advertising campaign that features the ideal Nebraska producer of the future: youthful, technology-savvy, entrepreneurial in spirit, willing to

partner with others, and who strongly believes in the economic viability of agricultural production in Nebraska.

- Accelerate plans to store, separate, and identify product origins for both livestock and crops, with special attention to GMO corn and Nebraska-branded beef. Although expensive in the short-term, labeling could provide a significant opportunity for Nebraska producers, particularly in the sale of premium or value-added products. The 2002 Farm Bill mandated country of origin labeling for livestock. It is likely that, as bio-engineering becomes more predominant, rules and regulations will require states to carefully manage the growing, storage, and distribution of GMO and non-GMO crops. States that establish sophisticated storage and distribution systems now will be ahead of the curve, and can market themselves as leading-edge states willing to partner with companies in the growing biotechnology field.